California Environmental Protection Agency
Air Resources Board

California Ambient Dioxin Air Monitoring Program
- Site Summary -

San Jose

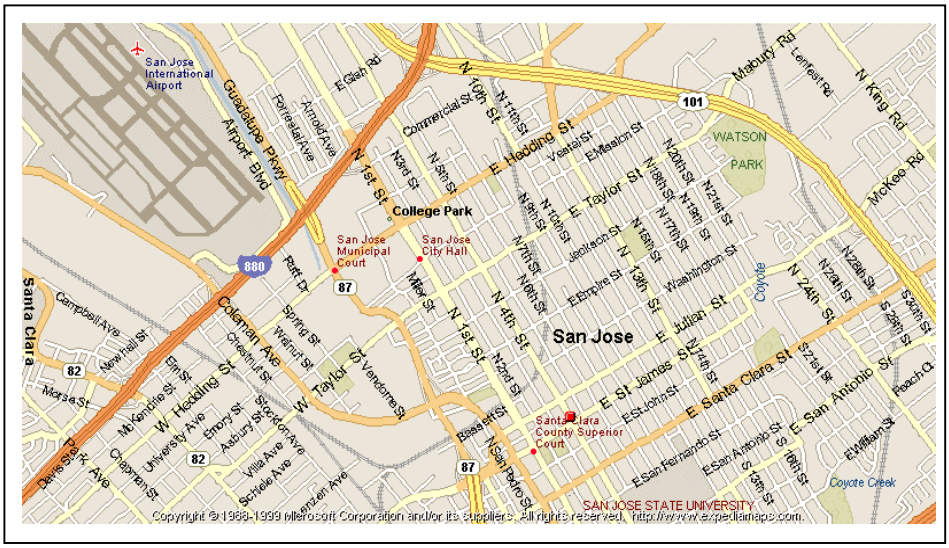
This page updated on November 4, 2003

Site Location:
Monitoring for the California Ambient Dioxin Air Monitoring Program (CADAMP) will be conducted at 158 Jackson Street in San Jose. This site is part of the Bay Area Air Quality Management District's (BAAQMD) monitoring network for criteria and toxic pollutants.

Site Approval:
With the BAAQMD's approval, the CADAMP dioxin sampler was placed at the BAAQMD's San Jose – Jackson Street site.

Monitoring Start Date:
Collection of CADAMP samples began in December 2001 at the 4th Street site in San Jose. The 4th Street site was moved in May of 2002 to nearby Jackson Street.

Reason for Choosing San Jose:
San Jose is the third largest city in California with a population of approximately one million. It is a large manufacturing area with 25 percent of all Santa Clara County workers employed at 6000 high-tech companies. San Jose was chosen as one of the ten areas for dioxin monitoring because it is heavily populated and is representative of southern Bay Area communities. It is an air pathway to densely populated residential and agricultural areas to the south. This site has recorded the highest concentrations of



particulate matter (PM10), carbon monoxide (CO), nitrogen dioxide (NO2), elemental carbon and benzo(a)pyrene in the SF Bay Area Air Basin. This location has extensive regular monitoring and its wind patterns are well characterized.

Emission Sources:
Emission sources in the vicinity include multiple freeways, heavy surface vehicular traffic, wood burning fireplaces and an international airport situated upwind.

Monitoring Parameters:
Dioxin-like compounds that will be monitored for CADAMP include dioxins, furans, congener specific PCBs, and PBDEs. A total of 75 compounds will be evaluated each month. Meteorological parameters will include wind speed, wind direction, ambient temperature and relative humidity.

Monitoring Schedule:
The dioxin sampler will be run for 28 consecutive days each month for the duration of the project. Sampling media consists of quartz fiber filters, polyurethane foam (PUF), and XAD resin. Filters will be collected and replaced every 6^{th} day. PUF/XAD cartridges will be collected on the 28^{th} day. Filters, PUF, and XAD will be composited for a single monthly sample analysis. Meteorological data will be collected continuously.

Anticipated End Date:
The ARB anticipates that CADAMP air monitoring will end at the San Jose – Jackson Street site in 2004.

Agencies/Resources/Roles:
The ARB is the lead agency for carrying out the California Ambient Dioxin Air Monitoring Program and has overall responsibility for the study. The BAAQMD provided assistance in selecting the San Jose station for CADAMP monitoring and will perform all CADAMP sample collection tasks. A laboratory under contract to the ARB will perform analysis of CADAMP samples. Staff in the ARB Monitoring and Laboratory Division, Quality Management Branch (Operations Planning and Assessment Section) will have the lead role in coordinating sampling efforts, tracking the project, validating the data, and conducting quality control and quality assurance activities. The ARB's Stationary Source Division (SSD) will evaluate ambient air concentrations to prioritize risk management strategies.

Connection to Other Air Monitoring Programs:
The BAAQMD is collecting samples routinely for air toxic measurements as part of their air toxic network at this San Jose site. Monitoring is currently being performed for NO_2, ozone, particulates (PM10, PM2.5, TEOM), total hydrocarbons and methane.